

shell by means of an 'upward nod'. This movement later takes on other important functions, being used in drinking, in brooding under the female in the 'greeting ceremony' and in adult displays.

Vocalisations begin before the duckling has hatched, when they are rather nondescript. After emergence the Eider duckling has a vocabulary of six discrete innate acoustic signals: the distress call, the complaint, the cohesion call, the contentment call, the brooding note, and the investigatory note.

A rich supply of invertebrate food, such as mosquitoes and aquatic Crustacea, is present at the time of hatching, and the ducklings' feeding mechanisms develop rapidly. To begin with the duckling shows an innate interest in any 'potential food object', that is, anything small or dark or moving, or with any combination of these characters. By experience the duckling soon learns that some of these objects are edible and others are not, and it thus comes to concentrate on the small invertebrates. It is assisted in the development of feeding on aquatic organisms by an innate 'under water search' in which the head is partially submerged with the eyes beneath the surface but the external auditory meatus above. The bird can thus see its prey and hear acoustic signals at the same time.

As soon as the duckling reaches water after hatching it is able to crash dive, but a 'juvenile feeding dive' takes two or three days to develop fully. This involves an acrobatic leap from the water and re-entry head first, but it is replaced by a less agile 'adult feeding dive' as the bird fledges.

The mechanism of attraction to the female upon hatching is named the 'brooding reflex'. This involves a positive response to the feeling of contact around the head—as when the duckling pushes up into the female's feathers—resulting in quiescence of the duckling. It is suggested that the 'brooding reflex' may be of fundamental importance to proper imprinting.

## On the races of the Stonechat occurring in the Cape Province, South Africa, with the description of a new form

by M. COURTENAY-LATIMER

*Received 23rd December, 1960*

The present arrangement of the South African populations of the Stonechat *Saxicola torquata* (Linnaeus) into two races (*S. t. torquata* (Linnaeus), 1766: Cape of Good Hope, and *S. t. caffra* (Keyserling and Blasius), 1840: Uitenhage, eastern Cape Province) rests on the pioneer work of Sclater, *Ibis*, 1911, pp. 409–410. Later revisers, namely, Meinertzhagen, *Ibis*, 1922, pp. 20–29; Sclater, *Syst. Av. Aethiop.*, part ii, 1930, p. 467; Bowen, *Proc. Acad. Nat. Sci. Phil.*, vol. lxxxiii, 1931, pp. 7–9; Roberts, *Birds of South Africa*, 1940, p. 240, Vincent, *Check List Birds of South Africa*, 1952, p. 73; and McLachlan and Liversidge, *Roberts' Birds of South Africa*, 1957, pp. 306–307, all follow Sclater's original work closely, though Bowen and Roberts admit a third race (*S. t. stonei* Bowen, 1931: Villa General Machado, Angola) from the drier interior of South Africa.

Study of the pertinent literature reveals that the respective ranges of *S. t. torquata* and *S. t. caffra* have never been accurately determined by

workers. Sclater (1911) gives the range of the "western" race (*S. t. torquata*) as "from Namaqualand and the Cape Town neighbourhood", while some later workers, notably Roberts (1940), Vincent (1952) and McLachlan and Liversidge (1957), admit a much more extensive distribution, which is generally given as the "western and southern Cape Province". I have recently studied a comprehensive series of this small chat from various localities in the south-western, southern and eastern Cape Province, with results which do not support the present subspecific arrangement of the populations in the Cape Province of South Africa.

*S. t. torquata* is supposedly different to *S. t. caffra* in having the flanks largely white in the breeding male, which parts are variably overlaid with hazel brown in the latter subspecies, while the female has the throat whitish and the lower breast and abdomen white and not buffish as in *S. t. caffra*. Careful study of specimens of both sexes from localities in the south-west Cape (topotypes) (Cape Flats, Muizenberg, Bellville, Malmesbury, Somerset West, Citrusdal, Tulbagh, Clanwilliam, Calvinia, Swellendam, Grootvadersbosch (Swellendam, etc.) and other parts of the Union, reveals that the topotypical populations of the nominate race do not have the characters generally attributed to them. Furthermore, I cannot discern the slightest valid subspecific difference between the populations breeding in the south-western Cape Province and those of the coastal areas of the southern and eastern Cape, Natal and Zululand. Indeed, birds from the south-western Cape can be matched exactly by examples in a precisely similar condition of plumage from as far afield as coastal Pondoland, Natal, eastern Swaziland (Big Bend) and southern Portuguese East Africa (wintering birds). Bowen, *loc. cit.*, also noticed that in a series of six specimens of *S. t. torquata* available to him from the Cape of Good Hope some of the specimens did not seem typical of the race (as defined by Meinertzhagen, following Sclater).

*Muscicapa torquata* Linnaeus, 1766, is based on the "Gobe-mouche a collier du Cap de Bonne Espérance" of Brisson, and on the finding that eastern Cape Province and Natal birds are the same as those of the south-western Cape, *Pratincola robusta* Tristram, 1870, *Pratincola caffra* Keyserling and Blasius, 1840, and *Pratincola torquata orientalis* Sclater, 1911, are all now placed as synonyms of the first named. *Pratincola pastor* Strickland, 1844, based on a Levaillant reference, is also a synonym of *M. torquata*. In the light of these decisions, it becomes necessary to return to the original work of Sclater (1911) in order to determine on what material his so-called "western" race was founded. Reference to this work shows that Sclater had ten breeding birds from Port Nolloth, Little Namaqualand, collected by Claude Grant in July and August, 1903, and four from Durban Road (Durbanville), near Cape Town, taken in March and September in the same year by Grant. Other specimens in the British Museum (Nat. Hist.), London, also used by Sclater, came from Kugelfontein and Komaggas, Little Namaqualand, and from Cape Town. From this information it can be deduced with reasonable assurance that the characters given by Sclater for the "western", race of the Stonechat were based largely on or influenced by a preponderance of material from Little Namaqualand. This point is very important, because I now find that the Little Namaqualand series before me from Strandfontein, Garies,

Kamieskroon, Wallekraal, Port Nolloth and Alexander Bay, at the mouth of the Orange River, shows the characters generally ascribed by workers to the nominate race in having the hazel brown on the ventral surface of the male restricted in breeding birds to the middle and the sides of the breast; the females with whitish throats and sharply demarcated white over the lower breast and abdomen. This very distinctively marked race appears to be largely restricted to the dunes and sea-fog region of western Little Namaqualand—a region already well-known for its number of endemic races, most of which tend to be greyer or whiter than their congeners from further east or south. The characters of the Little Namaqualand Stonechat are in keeping with this general trend of variation in western Cape bird forms.

Now that the topotypical populations of *S. t. torquata* have been shown to be the same as the *S. t. caffra* of authors, the *S. t. torquata* of Selater and subsequent workers, as understood on the basis of Little Namaqualand birds, will require to be given a name. I propose:

*Saxicola torquata clanceyi*, subsp. nov.

*Type*: ♂, adult. Wallekraal, western Little Namaqualand, north-western Cape Province (30° 21' S., 17° 27' E.). 8th August, 1960. Collected by E. Hayden. In the collection of the East London Museum. E. L. Mus. No. 8291.

*Description*: Similar to *S. t. torquata* (Linnaeus), 1766, of the south-western and eastern Cape, Natal and Zululand, from which it differs as follows: *Adult male* in breeding plumage with the hazel brown of the ventral surface restricted to the median surface and the adjacent sides of the breast, thereby exhibiting much more white laterally. Pure white extends from the sides of the neck and the edges of the breast down the sides of the body and over flanks, mid- and lower- breast, abdomen, crissum and under tail-coverts. *Adult female*: differs from that of *S. t. torquata* in having the throat whiter (when worn usually showing a lot of basal black over the lower throat), not buffy, and with the lower breast abdomen, caudad surfaces of the flanks, crissum and under tail-coverts white, not buffy. Also rather greyer and less warmly coloured on the upper-parts. Distinctions best marked in the breeding dress. Similar in size.

*Paratypical material*: 11 ♂♂, 2 ♀♀. All from the following localities in western Little Namaqualand: Wallekraal, 3 ♂♂, 2 ♀♀; 20 miles S.W. of Garies, 1 ♂; Garies, 1 ♂; Strandfontein, 1 ♂; near Kamieskroon, 1 ♂; Port Nolloth, 3 ♂♂; Alexander Bay, 1 ♂. Also examined—a long series of *S. t. torquata*, and series of *S. t. stonei* and *S. t. oreobates* Clancey, 1956, described from Basutoland.

*Range*: The dune area of western Little Namaqualand from about the mouth of the Orange River (Alexander Bay), to just south of the mouth of the Olifants River (Strandfontein), south of which it intergrades with *S. t. torquata* (A series of breeding birds from Clanwilliam shows this intergradation clearly).

*Measurements of the Type*: Wing 71.5, culmen 17, tarsus 22.5, tail 52 mm.

*Remarks*: I name this new race in honour of Mr. P. A. Clancey,



Director of the Durban Museum, in recognition of his help in elucidating the taxonomy of the Cape Stonechats and the vast amount of work he has done to help ornithology in southern Africa.

Apart from *S. t. torquata* and *S. t. clanceyi*, two other races of this species occur within the political limits of the Cape Province. The two taxa just mentioned are actually coastal in their distribution, while in the interior of the Cape Province rather paler birds occur. Breeding males in a series in the East London Museum from the drier interior of the eastern Cape (mainly Albany division) are distinctly lighter and more yellowish, more cinnamon coloured, over the breast, sides of the body and flanks than in *S. t. torquata* of the coastal strip, while the central portion of the lower breast, the abdomen, crissum and under tail-coverts are buffy white, not pure white, thereby presenting a less strongly contrasted chromatic effect over the median ventral surface. Mr. Clancey has kindly compared these specimens at my request with material in the Durban Museum, and has pronounced them as applicable to *S. t. stonei*, which race ranges from Angola and Northern Rhodesia, southwards in the interior of south-central Africa to the northern and eastern Cape Province, Orange Free State, the Transvaal and most of Southern Rhodesia. As Stonechats are given to much seasonal movement, further collecting of breeding birds will be necessary in order to clear up the precise distributions of *S. t. torquata* and *S. t. stonei* in the eastern Cape Province.

*S. t. oreobates* also occurs within the limits of the Cape Province, the East London Museum collection possessing two females of this race from localities in the north of the eastern parts of the province from localities in the mountains lying adjacent to Basutoland. Males of *S. t. oreobates* resemble *S. t. stonei* over the abdominal surface, but are much darker and more saturated. The racial distinctions are, however, better marked in the female, which is a more vinaceous grey, less buff, on the upper-parts than in either *S. t. torquata* or *S. t. stonei*, and on the under-parts the throat is distinctly darker and the rest of the ventral surface more vinaceous tinged. It is a restricted montane race, occurring in two widely separated regions, namely, the highlands of Basutoland and the eastern highlands of Southern Rhodesia.

#### *Acknowledgments*

For the loan of comparative material I am grateful to the Directors of the following museums: South African Museum, Cape Town; Durban Museum; and the Transvaal Museum, Pretoria.

I am deeply grateful to Mr. P. A. Clancey, of the Durban Museum, for his help and guidance in the preparation of this report and for effecting certain critical comparisons for me.

To Mr. G. G. Smith I extend gratitude for making possible the collection of the valuable series of ornithological material in this Museum.

## Notes on African Thrushes

### PART ONE

by C. M. N. WHITE

*Received 15th January, 1961*

The present series of notes arise, from the preparation of a revised check list of the African *Turdinae*. As with most other Passerine groups of any